CATERPILLAR®

CATERPILLAR® T20
User Manual

NOTES, CAUTIONS AND WARNINGS:

NOTE: A NOTE indicates important information that will enable you to make the most out of your T20 Tablet.

CAUTION: A CAUTION indicates potential damage to hardware or loss of data if you do not follow the instructions.

WARNING: A WARNING indicates potential damage to property, personal injury, or death.

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NOTICE

Some features of the product and its accessories described herein rely on the software installed, capacities and settings of local network, and may not be activated or may be limited by local network operators or network service providers. Therefore, the descriptions in this manual may not exactly match the purchased product or its accessories.

The manufacturer reserves the right to change or modify any information or specifications contained in this manual without prior notice or obligation.

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IMPORT AND EXPORT REGULATIONS

Customers shall comply with all applicable export or import laws and regulations. Customers must obtain all necessary governmental permits and licenses to export, re-export or import the product mentioned in this manual including the software and technical data.

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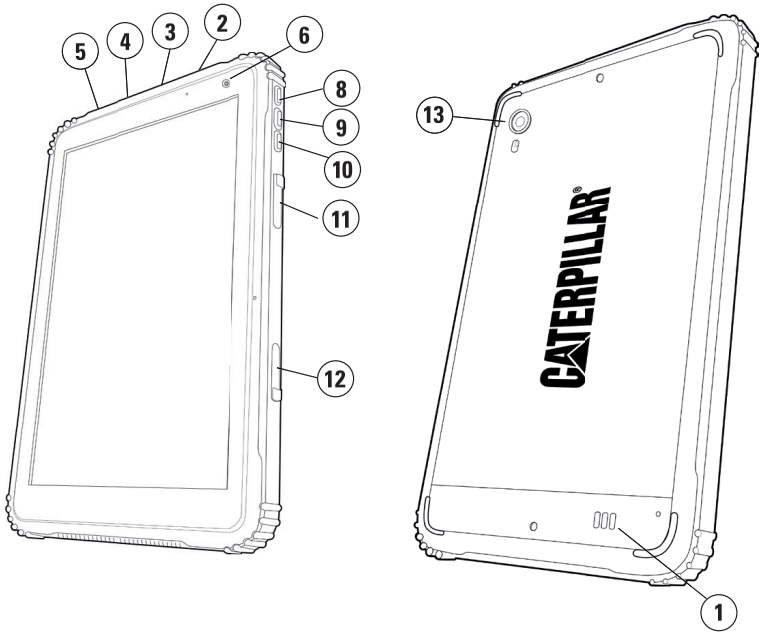
USING YOUR T20 TABLET

1.0 FEATURES

Front and back features



1. SPEAKER
2. CHARGING PORT
3. MICRO USB PORT COVER
4. HDMI PORT COVER
5. AUDIO JACK PORT BEHIND THE HDMI COVER
6. CAMERA 2.0MP
7. CORNING GLASS
8. POWER ON/OFF BUTTON
9. VOLUME INCREASE BUTTON
10. VOLUME DECREASE BUTTON
11. SD CARD SLOT
12. SIM SLOT (MICRO SIM)
13. CAMERA 5.0MP

2.0 ACCESSORIES

Your T20 Tablet includes the following accessories:

- 1 x Charger and cable
- 1 x Quick Start Guide
- 1 x Warranty Statement

3.0
SETTING UP YOUR T20 TABLET

⚠ **WARNING:** Before you begin any of the procedures outlined in this section, ensure that you have read the safety information provided with your Tablet.

3.1 CHARGE YOUR TABLET

1. Open the charging port cover.
2. Connect the power cable to the charging port – see (5) on page 4.
3. Plug the charger into an AC mains socket.

Note: The battery will not be charged when you unpack your Tablet. We recommend that you fully charge your T20 Tablet before first using it in battery mode.

⚠ **CAUTION:** Charge the battery in an ambient temperature of 0 °C to 35 °C.

⚠ **CAUTION:** Use only Caterpillar® approved chargers and cables. Using unauthorised power adapters or cables may severely damage your T20 Tablet and invalidate the warranty.

You can monitor the charging process by referring to the LED battery-charge located at the top right of your T20 Tablet. When your Tablet is charging, it will either display a flashing Red LED or solid Red LED.

LED behaviour	Description
Solid Red	Battery is fully charged
Flashing Red	Battery is charging

Additionally, by referring to the on-screen battery icon display, you can monitor the charging progress of the battery:

Battery Icon	Description
Full battery and plug	Your Tablet is fully charged and connected to the AC mains power
Partially charged battery and plug	Your Tablet is connected to the AC mains power and is partially charged. **NOTE:** If you click on the icon, it will indicate the charge level of the battery, and the time left until your Tablet is fully charged
Partially charged battery	Your Tablet is in battery mode. The device is running on battery power and is discharging the battery
Battery low warning symbol	Your Tablet is in battery mode and is running on battery power. The battery has low charge
Battery critically low	Your Tablet is running on battery power and the battery charge is critically low. Please connect to AC mains

3.2 TURN ON YOUR TABLET

⚠ **WARNING:** Before you begin any of the procedures outlined in this section, ensure that you have read the safety information provided with your Tablet.

3.3 SETTING UP A MICROSOFT ACCOUNT

With a Microsoft account, you have access to the Windows store, Cloud storage to back up files and data, social networking sites, contact information, and much more.

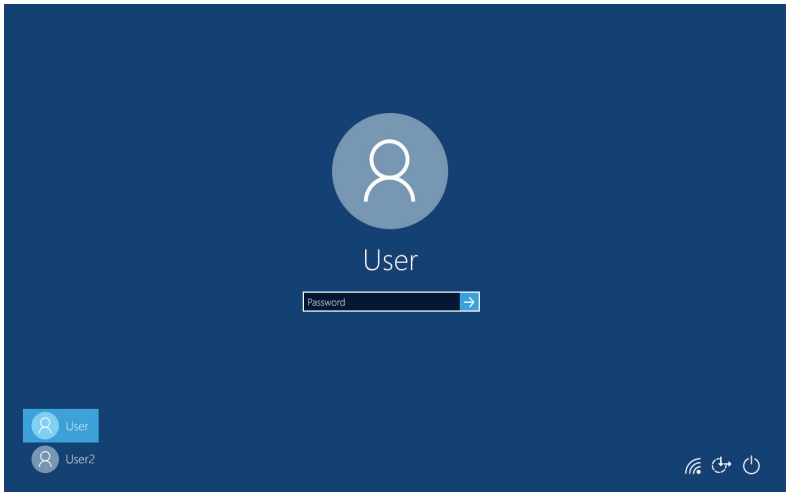
1. When you initially turn on your T20 Tablet, the first screen displayed will be the Windows 10 Start Up Screen. To start using your Tablet, you must complete the Windows set-up.

NOTE:
It is recommended that you create a Microsoft account to ensure you are aware of all the distributed updates from Microsoft. This will ensure that your Tablet's OS remains current and that it has the latest security patches.

2. Your Microsoft account will enable you to set up an email account and password, so you can sign into your Windows user account securely. This is free to set up and the steps are easy to follow. It is possible to set up an account with most email addresses, however if not, you can create a new email address.

NOTE:
If more than one person is using the Tablet, we recommend each user creates their own account. This way, each user can personalise their profile and set their own parameters.

3. Follow the on-screen instructions to install the operating system.



3.4 TURN OFF YOUR TABLET

- Press and hold the power button for a couple of seconds

- Slide in the direction of the arrow to shut down the Tablet
  OR
- Press the power Icon positioned in the lower left corner of the screen. It will offer Sleep, Shutdown or Restart, select your preferred option

4.0
INSERTING SIM AND microSD CARDS

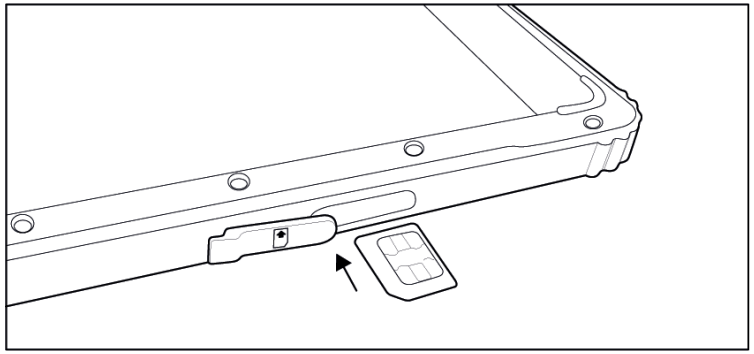
4.1 INSERTING A SIM CARD

NOTE:
Your T20 Tablet only accepts micro-SIM cards. You will need an adapter if you wish to use a smaller SIM.

1. Open the SIM slot port cover - see (12) on page 6.

2. Place your tablet on a flat surface with the screen facing downwards on top of a cloth to protect the screen.

3. Push the micro-SIM until the SIM “clicks” into place.



4.2 INSERTING A micro-SD CARD

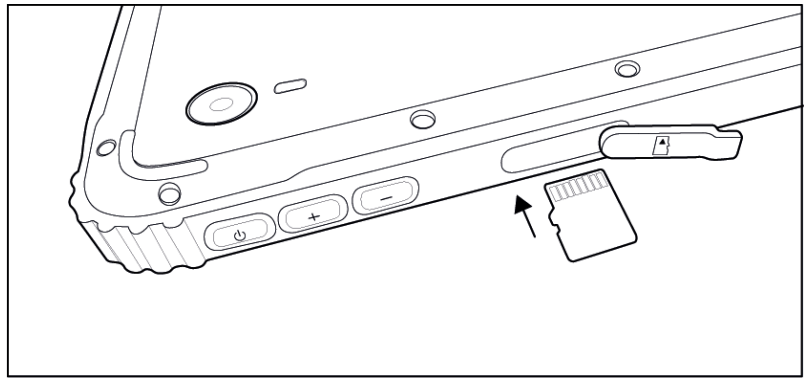
NOTE:
Your T20 Tablet only accepts microSD cards.

1. Open the SD card port cover - see (11) on page 6.

2. Position the microSD card so that the pins are pointed towards the slot as per below illustration.

3. Push the microSD card into the slot and close the port cover.

The below illustration shows the location of the ports and the microSD and SIM cards.



4.3 REMOVING A micro-SIM CARD

1. Open the port cover.

2. Push the edge of the micro-SIM card into the Tablet. The Tablet mechanism will release the micro-SIM.

3. You can now remove the micro-SIM.

4.4 REMOVING A microSD CARD

△ **CAUTION:** Removing a microSD card whilst the Tablet is in use may cause data loss or result in application errors. Make sure you have completed all current actions with the microSD card before attempting to remove it. Open the port cover.

1. Open the port cover.

2. At the bottom of the display towards the right of the tablet is a ^ symbol. Touch this and a USB icon will pop up.

3. Tap the USB icon for the option to eject the microSD card.

4. Your Tablet will display a message indicating that it is now safe to remove the microSD card.

5. Open the microSD port and push the edge of the microSD card. The Tablet mechanism will now eject the microSD.

6. You can now remove the microSD card.

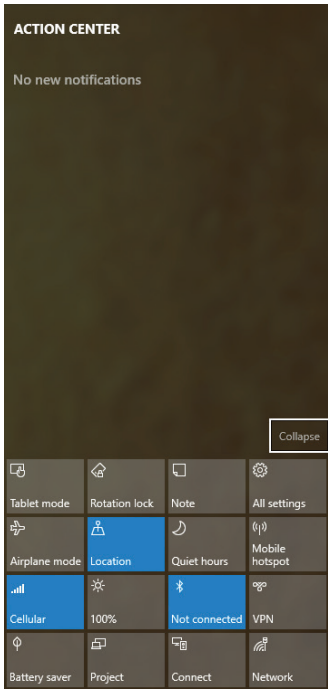
5.0
WIRELESS NETWORKS

5.1 CONNECTING TO WI-FI

1. Swipe-in from the right edge of the display to access the ACTION CENTER.
2. Select Network (bottom right). The next window will show Wi-Fi turned off.
3. Tap Network Settings at the bottom of this window.
4. This will display a new window showing “Wi-Fi Off”. Click on this to enable Wi-Fi. It will now show “Wi-Fi On”.
5. Navigate through the options: Available Networks, Hardware Properties and Manage Known Networks. Select the network you wish to connect to and follow the instructions.
6. Note: Secured networks will require a Passcode.

5.1 TURN OFF WI-FI

1. Swipe-in from the right edge of the display to access the ACTION CENTER.
2. In the ACTION CENTER, tap the Wi-Fi icon.
3. Then in the next screen, tap the Wi-Fi icon again to disable your Tablet’s Wi-Fi.



6.0
LEARN TO USE YOUR SCREEN MULTI-TOUCH DISPLAY

Your T20 Tablet has a multi-touch display. Use these finger gestures to operate your Tablet’s screen:

Single tap	**This allows you to:**
Tap on the display with your finger	• Use buttons on the screen • Input text using the on-screen keyboard • Select items on the screen: including options, entries, images, and icons • Start apps
Single tap and hold	
Tap and hold your finger on the display	• Display detailed information about an item • Open the menu of an item to perform further actions
Drag	
1. Tap and hold your finger on an item 2. Keep your finger in contact with the display, then use your fingertip to move the item to your desired location 3. Remove your finger across the display to drop the item	• Move items such as images and icons on the display
Swipe or slide	
Move your finger in a vertical or horizontal direction on the display	• Scroll through the Start screen, web pages, lists, entries, photos, contacts, and so on. • Close an app. (Swipe the app to the bottom of the display.)
Zoom in	
Touch the display with two fingers, then move your fingers apart	• Enlarge an image or web page
Zoom out	
Touch the display with two fingers, then move your fingers together	• Reduce the view of an image or web page.

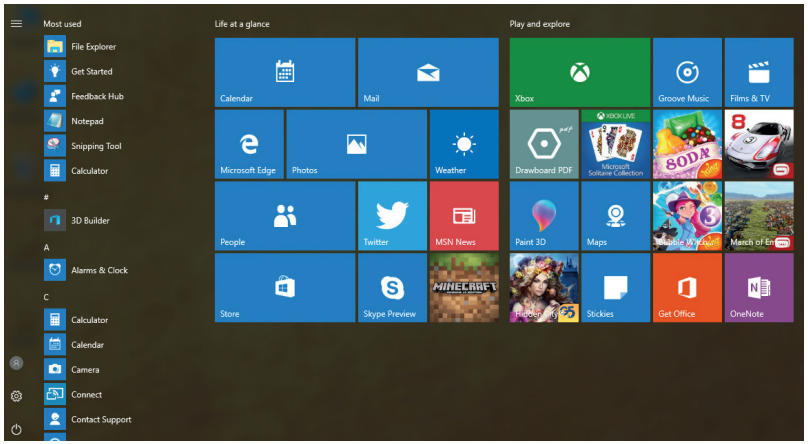
7.0
MICROSOFT WINDOWS 10 FAMILIARISATION

When you initially power up your T20 Tablet, you must complete the Windows set up. The first screen displayed will be the Windows Start Up Screen. Follow the on-screen instructions to correctly install the operating system.

NOTE:
We recommended that you create a Microsoft account to ensure that you are aware of the distributed Microsoft updates.

7.1 CONNECTING TO WIFI

- The Windows 10 Start screen displays a list of default and custom Live Tiles, which act as a shortcut to Mail, Microsoft EDGE, Weather app, Calendar, Windows Store, Skype, and other installed apps.
- Live Tiles on your Start screen change and update in real time to show news and sports updates, weather updates, social-networking feeds, and so on.
- The interface gives you direct access to your most recently used apps, emails, photos, music, videos, contacts, updates from social-networking sites, and frequently viewed websites. You can pin your favourite apps as tiles to customise the Start screen.



7.2 ACCESSING THE START SCREEN

When your Tablet boots into Windows, you can access the Start screen from any window or app by using one of the following methods.

- Press the Windows Icon button.

OR

- Swipe-in from the right edge of the display to access the ACTION CENTER.
- Then select Tablet Mode.

7.3 CUSTOMISING THE START SCREEN TILES

- **Pinning icons:** Tap and hold the icon you want to move from your apps list to the Start screen.
- **Moving icons:** Drag the icon to your desired location on the Start screen, then drop it.
- **More options for icons:** Hold the icon.

NOTE:
You can also personalise the Start screen by setting your favourite picture as the wallpaper.

7.4 SWIPE LEFT

Swipe-in from the right edge of the display to show the ACTION CENTER. The ACTION CENTER provides access to the system commands, such as Tablet Mode, Rotation Lock, Note, Airplane mode, Location, Quiet hours, Battery charge available, Bluetooth, VPN, Battery saver, Project Wi-Fi and all Settings options.

7.5 SWIPE RIGHT

- Swipe-in quickly from the left edge of the display to show the apps currently running.
- Touch the thumbnail of a running app to open

7.6 SCREEN ROTATION

To ensure that you experience optimal viewing when using your T20 tablet, the screen rotation will automatically adjust to portrait or landscape format, depending on how you are holding the device. You can disable the automatic Screen Rotation in settings and choose to lock it in either landscape or portrait.

NOTE:
Some apps may not support automatic screen rotation as they are designed to work in only one screen orientation

7.7 LOCKING THE SCREEN ROTATION

1. Change the screen to the desired rotation.
2. Swipe in from the right edge of the tablet screen to access the ACTION CENTER.
3. One of the options is Rotation lock select. The icon will display “On” to indicate screen rotation is locked.

8.0 SYNCHRONISING YOUR TABLET

USING A MICROSOFT ACCOUNT

1. Swipe in from the right edge of the Tablet screen to access the ACTION CENTER.
2. From the ACTION CENTER, select Sync Your Settings.
3. Then follow the on-screen directions.
4. Your T20 Tablet will now sync your settings with devices associated with your account name on Windows 10.

9.0
TECHNICAL SPECIFICATION

Dimensions	220x143x14mm
Weight	650g
Display size	8”
Processor Type	Intel Atom x5-Z8350
Processor Speed	1.44GHz
Display Resolution	800x1280
Rear Camera	5MP
Front Camera	2MP
Video Connector	mini-HDMI
Memory RAM	2GB
Memory ROM	64GB
SD Card	Micro SD - Max 64GB
USB Speed	USB 3.0 (micro)
Battery Size	7500mAh
Windows Version	Windows 10 (Home or Pro depending on model)
SIM Card Size	Micro SIM
Charging Options	USB2.0 or DC
Cellular Connectivity	GPRS, EDGE, HSPA, 4G
4G Speed	DL – 150 Mbps UL – 50 Mbps
2G Speed	850, 900, 1800, 1900
3G Speed	1, 2, 5, 8
4G Bands	1, 2, 3, 4, 5, 7, 8, 20
WiFi Connectivity	802.11 b/g, 2.4GHz 802.11.n , 2.4G/5G 802.11.ac, a 5G
Bluetooth	BT4.1
GPS Support	GPS, Glonass
Ingress Protection	IP67 (Waterproof 1m for 30 mins)
Drop Test	1.2m

10.0
RF EXPOSURE INFORMATION (SAR)

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure.

Specific Absorption Rate (SAR) refers to the rate at which the body absorbs RF energy. SAR limits is 2.0 W/kg (averaged over 10 grams of tissue) in countries that follow the Council of the European Union limit.
Tests for SAR are conducted using standard operating positions with the device transmitting at its highest certified power level in all tested frequency bands.

This device has been tested and meets applicable limits for radio frequency exposure at 0mm separation distance.
The highest reported SAR values under the CE regulatory for the tablet is 1.649 W/kg

10.1 EU COMPLIANCE STATEMENT

This device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.
Restrictions in:
Belgium (BE), Bulgaria (BG), Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE), United Kingdom (UK), Switzerland (CH), Norway (NO), Iceland (IS), Liechtenstein (LI) and Turkey (TR).

10.2 CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

10.3 WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

This symbol means that according to local laws and regulations your product and/or its battery shall be disposed of separately from household waste.

When this product reaches its end of life, take it to a collection point designated by local authorities. Proper recycling of your product will protect human health and the environment.

To prevent possible hearing damage, do not listen at high volume levels for long periods.

11.0
RF SPECIFICATION

Function	Operation Frequency	Max RF output power	Limit
BLE	2402-2480MHz	5.08dBm	20dBm
BT(BR+EDR)	2402-2480MHz	GFSK:3.08dBm; Pi/4 DQPSK:2.59dBm; 8DPSK:2.41dBm	20dBm
WIFI802.11B/G/N (HT20,HT40	802.11b/g/n(20Mhz): 2412-2472MHz; 802.11n(40Mhz): 2422-2462Mhz	802.11b:16.25dBm; 802.11g:14.36dBm; 802.11n20:12.31dBm; 802.11n40:12.39dBm;	20dBm
802.11a/n(20/40)/ ac(20/40/80)	5180-5240MHz	802.11a:14.76dBm; 802.11n20:13.76dBm; 802.11n40:10.73dBm; 802.11ac20:10.74dBm; 802.11ac40:10.36dBm; 802.11ac80:7.62dBm	23dBm
GPRS/EDGE 900	TX(Uplink):880-915Mhz; RX(Downlink):925-960Mhz	GPRS 900:31.57dBm; EDGE 900:26.57dBm	Class 4 (33±3dBm)
GPRS/EDGE 1800	TX(Uplink):1710 -1785Mhz; RX(Downlink):1805- 1880Mhz	GPRS 1800:28.67dBm; EDGE 1800:25.35dBm	Class 1 (30±3dBm)
WCDMA B1	TX(Uplink):1920-1980Mhz; RX(Downlink):2110- 2170Mhz	21.69dBm	24(dBm)+1.7/-3.7(dBm)
WCDMA B8	TX(Uplink):880-915Mhz; RX(Downlink):925-960Mhz	22.75dBm	24(dBm)+1.7/-3.7(dBm)
LTE FDD B1	TX(Uplink):1920-1980Mhz; RX(Downlink):2110- 2170Mhz	23.11dBm	23(dBm)±2.7(dBm)
LTE FDD B3	TX(Uplink):1710-1785Mhz; RX(Downlink):1805- 1880Mhz	24.08dBm	23(dBm)±2.7(dBm)
LTE FDD B7	TX(Uplink):2500-2570Mhz; RX(Downlink):2620- 2690Mhz	22.94dBm	23(dBm)±2.7(dBm)
LTE FDD B8	TX(Uplink):880-915Mhz; RX(Downlink):925-960Mhz	24.25dBm	23(dBm)±2.7(dBm)
LTE FDD B20	TX(Uplink):832-862Mhz; RX(Downlink):791-821Mhz	24.09dBm	23(dBm)±2.7(dBm)
GPS	RX:1.57542Ghz	N/A	N/A

This product can be used across EU member states.

RUGGED TABLET
MODEL NUMBER: T20
OPERATING TEMPERATURE: -20° C TO 40° C

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 0mm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.

This device in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EC. All essential radio test suites have been carried out.

1. Use carefully with earphones. Excessive sound pressure from earphones and headphones can cause possible hearing loss

2. CAUTION : RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

3. The product shall only be connected to a USB interface of version USB 2.0

4. Adapter shall be installed near the equipment and shall be easily accessible

5. The supplied adapter is considered as separate to the T20 tablet

6. The device complies with RF specifications when the device is used at 0mm from your body

7. USB 3.0 : load up to 0.5A

	SI	SK

Declaration of Conformity

Manufacturer:

Name: Bullitt Mobile Limited
Address: One Valpy, Valpy Street, Reading, Berkshire, England RG1 1AR

EQUIPMENT TYPE : Rugged Tablet
MODEL CODE : T20

We, Bullitt Mobile Limited, declare under our sole responsibility that the product described above is in conformity with the relevant Union harmonization legislations:
RE Directive (2014/53/EU)

APPLICATION OF COUNCIL DIRECTIVE:

Applied / Complied Harmonized Standards	
RE Directive 2014/53/EU, Article 3(1)(a) Safety	EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
RE Directive 2014/53/EU, Article 3(1)(a) Health	RE Directive 2014/53/EU, Article 3(1)(a) Health
RE Directive 2014/53/EU, Article 3(1)(b) EMC	Draft EN 301 489-1 V 2.2.0, Draft EN 301 489-17 V3.2.0, Draft EN 301 489-19 V2.1.0, Draft EN 301 489-52 V1.1.0 EN 55032:2015, EN 55024:2010+A1:2015
RE Directive 2014/53/EU, Article 3(2) Radio	EN 301 511 V12.5.1, EN 301 908-1 V11.1.1 EN 301 908-2 V11.1.1, EN 301 908-13 V11.1.1 EN 300 328 V2.1.1, EN 303 413 V1.1.1 EN 301 893 V2.1.1

CE	Doc by: Shenzhen NTEK Testing Technology Co., Ltd.	Certificate Number: RE-17092006

SIGNATURE : Wayne Huang
POSITION : Director of ODM Management
DATE OF ISSUE : September 21, 2017

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